Xinmeng Li



Professional summary

PhD candidate in computer science with career interests in bioinformatics and machine learning.

Education

2017-Current Tufts University, Medford, MA.

PhD student in Computer Science, Expected Graduation: May, 2020.

2015 - 2017 Tufts University, Medford, MA.

Master of Science

The Kerk and Janelle Loevner Graduate Fellowship

Courses: Algorithm, Machine Learning, Deep Learning, Statistical Pattern Recognition

2011 - 2015 Sichuan University, Sichuan, China.

Bachelor of Engineering $\operatorname{\it Cum\ Laude}$ in Computer Science, May 2015

The Lixin Tang Fellowship (Until PhD Graduation)

Research Experience

2016 - 2017 Tufts University, Department of Computer Science.

Research Assistant

- Develop computational methods for analyzing antibody sequences inhibiting specific enzymes
- Characterize pathway functionality using experimental mass spectral data
- Identify metabolites with in silico fragmenter based on tandem mass spectral data

2011 - 2015 Sichuan University, College of Computer Science.

Project Leader

- ullet Develop software that can measure volume of massive material based on aerial photography
- \bullet Prepare and present to earn $\mathbf{national}$ $\mathbf{funding}$ for the project
- Writing proposal to publish the Chinese software copyright

2012, 2013 Zhejiang University, College of Control Science and Engineering.

Summer Research Assistant

- Collect and preprocess near-infrared reflectance spectroscopy data
- \bullet Analyze experimental data by basic support vector machine algorithm

Teaching Experience

2015 - 2017 Tufts University, Department of Computer Science.

 ${\bf Teaching\ Assistant}$

 $Courses:\ Artificial\ Intelligence,\ Bioinformatics,\ Algorithms$

- Prepare and teach class on genetic algorithm and simulated annealing
- \bullet Evaluate students on experiments, homeworks and projects
- Conduct laboratory using computational tools to analyze biology data

Publication & Presentation

Li X, Van Deventer J, Hassoun S. "Towards the Design of Matrix Metalloproteinases (MMP) Antibody Sequences." In Proceedings of the 8th ACM International Conference on Bioinformatics, Computational Biology, and Health Informatics (pp. 624-624). ACM.

Porokhin, V., Li X, Hassoun S. "Pathway Enrichment Analysis for Untargeted Metabolomics." In Proceedings of the 8th ACM International Conference on Bioinformatics, Computational Biology, and Health Informatics (pp. 623-623). ACM.

 $\label{eq:LiX} \textbf{Liu L.} \ "Volume \ Measurement \ System \ of \ Massive \ Material \ Based \ on \ Aerial \ Photography."$ Chinese Software Copyright. 2014SR096344(30100-0000).

Hu R, Wang Y, Yang M, Li X, Luo Z, Li G. "Improved Analysis of Inorganic Coal Properties Based on Near-infrared Reflectance Spectroscopy." Analytical Methods. 2015;7(12):5282-8.